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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,448	07/19/2002	Hiroki Sato	2002-0348A	9408

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EXAMINER

FORD, VANESSA L.

ART UNIT	PAPER NUMBER
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1645

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/089,448

Applicant(s)

SATO ET AL.

Examiner

Vanessa L. Ford

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 1-3 and 5-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/29/2002.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Applicant's election with traverse of Group III, claim 4 filed on April 29, 2004 is acknowledged. Groups, I, II and IV, claims 1-3 and 5-12 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention. The traversal is on the grounds that the International Preliminary Examination acknowledges that the unity of invention for all of the original claims 1-8 of the PCT application filed. Applicant urges that since new claims 7-12 of the present application correspond to original claims 7 and 8, Applicant takes the position that all the claims 1-12 in the present application have unity of invention. Applicant urges that the restriction requirement should be withdrawn.

Applicant's arguments filed April 29, 2004 have been fully considered but they are not persuasive. Group I is the main invention in this application and lacks novelty, as anticipated by Mizuno (*International Journal of Medicinal Mushrooms*, Vol. 1, pp. 251-261). Mizuno teaches an inoculating agent, cultured hyphae extracted from *Cordyceps sinensis* (page 259). Group I is the main invention in this application and it lacks novelty, therefore the other claims are not so linked by a special technical feature within the meaning of PCT Rule 13.2 so as to form a single inventive concept. Inasmuch as, the technical feature does not define a contribution over the art, it is not "special" within the meaning of PCT Rule 13.2. Consequently, Groups I, II, III and IV lack unity of invention.

Restriction is required under 35 U.S.C. 121 and 372.

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The MPEP 803 states that restriction is proper between patentably distinct inventions where the inventions are (1) independent or distinct as claimed and (2) a serious search and examination burden is placed on the examiner if restriction is not required.

The term "distinct" is defined to mean that two or more subjects as disclosed are related, for example as product and method of use, etc., but are capable of separate manufacture, use or sale as claimed, and are patentable over each (see MPEP 802.01). In the instant situation, the inventions of Groups I-IV are drawn to distinct inventions which are separate products and methods capable of separate manufacture, use or sale as described in the previous Office Action.

The literature search, particularly relevant in this art, is not co-extensive, because for example, Groups I and III are drawn to different products. Groups II and IV are drawn to different methods. Clearly different searches and issues are involved in the examination of each Group. It should be remembered that this application is filed under 371 (national stage) and is subject to U.S. patent examination practices. It should also be remembered that the PCT preliminary examination report has no bearing on U. S. examination practices. For these reasons the restriction requirement is deemed to be proper and is therefore made FINAL.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 4 is rejected under 35 U.S.C. 102(b) as anticipated by Sung et al (*the Korean Journal of Mycology, June 1993*).

Claim 4 is drawn to a spawned insect for the production of fruit bodies of an entomopathogenic fungus, being inoculated with hyphal bodies of the entomopathogenic fungus in the body.

Sung et al teach spawn insects (e.g. *Artogeria napi* L, *Hempitera*, *Plutella xylostella*, *Orthopetera*, *Acnantholyda posticalise*) which are inoculated with fungus and used for the production of fruit bodies (see the Abstract). The claim limitation "for the production of fruit bodies of an entomopathogenic fungus" is being viewed as a limitation of intended use. Sung et al anticipate the claimed invention.

Since the Office does not have the facilities for examining and comparing applicant's spawned insect with the spawned insect of the prior art, the burden is on the applicant to show a novel or unobvious difference between the claimed product and the product of the prior art (i.e., that the spawned insect of the prior art does not possess the same material structural and functional characteristics of the claimed spawned

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insect). See In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977) and In re Fitzgerald et al., 205 USPQ 594.

3. Claim 4 is rejected under 35 U.S.C. 102(b) as anticipated by Kamata et al (*J. Appl. Ent.* 121, 17-21, 1997).

Claim 4 is drawn to a spawned insect for the production of fruit bodies of an entomopathogenic fungus, being inoculated with hyphal bodies of the entomopathogenic fungus in the body.

Kamata et al teach spawn insects (e.g. *Quadricalcarifera punctatella*) which are inoculated with fungus and used for the production of fruit bodies (page 17, 2<sup>nd</sup> column). The claim limitation "for the production of fruit bodies of an entomopathogenic fungus" is being viewed as a limitation of intended use. Kamata et al anticipate the claimed invention.

Since the Office does not have the facilities for examining and comparing applicant's spawned insect with the spawned insect of the prior art, the burden is on the applicant to show a novel or unobvious difference between the claimed product and the product of the prior art (i.e., that the spawned insect of the prior art does not possess the same material structural and functional characteristics of the claimed spawned insect). See In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977) and In re Fitzgerald et al., 205 USPQ 594.

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4. Claim 4 is rejected under 35 U.S.C. 102(b) as anticipated by Harada et al (*Nippon Kingakukai Kaiho*, 1995, Vol. 36, No.2, pp. 67-72, Abstract only).

Claim 4 is drawn to a spawned insect for the production of fruit bodies of an entomopathogenic fungus, being inoculated with hyphal bodies of the entomopathogenic fungus in the body.

Harada et al teach spawn insects (e.g. *Mamestra brassicae*) which are inoculated with hyphal bodies and used for the production of fruit bodies (page 17, 2<sup>nd</sup> column). The claim limitation "for the production of fruit bodies of an entomopathogenic fungus" is being viewed as a limitation of intended use. Harada et al anticipate the claimed invention.

Since the Office does not have the facilities for examining and comparing applicant's spawned insect with the spawned insect of the prior art, the burden is on the applicant to show a novel or unobvious difference between the claimed product and the product of the prior art (i.e., that the spawned insect of the prior art does not possess the same material structural and functional characteristics of the claimed spawned insect). See In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977) and In re Fitzgerald et al., 205 USPQ 594.

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5. Claim 4 is rejected under 35 U.S.C. 102(b) as anticipated by Fukatsu et al (*Journal of Invertebrate Pathology* Nov. 1997, Vo. 70, No. 3, p. 203-208, Abstract only).

Claim 4 is drawn to a spawned insect for the production of fruit bodies of an entomopathogenic fungus, being inoculated with hyphal bodies of the entomopathogenic fungus in the body.

Fukatsu et al teach spawn insects (e.g. *Paecilomyces tenuipes*) which are inoculated and cultured to be used for the production of fruit bodies (page 17, 2<sup>nd</sup> column). The claim limitation "for the production of fruit bodies of an entomopathogenic fungus" is being viewed as a limitation of intended use. Fukatsu et al anticipate the claimed invention.

Since the Office does not have the facilities for examining and comparing applicant's spawned insect with the spawned insect of the prior art, the burden is on the applicant to show a novel or unobvious difference between the claimed product and the product of the prior art (i.e., that the spawned insect of the prior art does not possess the same material structural and functional characteristics of the claimed spawned insect). See In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977) and In re Fitzgerald et al., 205 USPQ 594.

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**Pertinent Prior Art**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure but used in the above rejections: Mizuno et al (*International Journal of Medicinal Mushrooms*, vol. 1, p. 251-261, 111) and (*Japanese Application No. 5-3217930, abstract*).

**Status of Claims**

8. No claims are allowed.

**Conclusion**


9. Any inquiry of the general nature or relating to the status of this general application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Papers relating to this application may be submitted to Technology Center 1600, Group 1640 by facsimile transmission. The faxing of such papers must conform with the notice published in the Office Gazette, 1096 OG 30 (November 15, 1989). Should applicant wish to FAX a response, the current FAX number for the Group 1600 is (703) 872-9306.

Any inquiry concerning this communication from the examiner should be directed to Vanessa L. Ford, whose telephone number is (571) 272-0857. The examiner can normally be reached on Monday – Friday from 9:00 AM to 6:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynette Smith, can be reached at (571) 272-0864.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Vanessa L. Ford  
Biotechnology Patent Examiner  
August 13, 2004

  
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